MAYO CLINIC

Mayo Clinic News Network

Title: / Date

Intro: Epilepsy is one of the most common neurologic conditions, affecting about three million Americans. Two-thirds of patients get some relief from medications. "But, that leaves a third or roughly a million people with epilepsy who, despite taking medicine – say, twice a day every day – continue to have seizures," says Dr. Gregory Worrell, a Mayo Clinic neurologist.

"I tried numerous medications that weren't working," says Chris White, a young man who's lived with epilepsy since birth. "There's a constant fear of what's going to happen today." For Chris, relief came in the form of high-tech brain stimulation that was actually developed and approved for treating other conditions like chronic pain and Parkinson's disease.

The result was a remarkable transformation. "My life has changed 180 degrees," Chris says with a broad grin. "I've been able to become employed full time, with benefits. I'm able to be anywhere. I can think of having a family." Ian Roth reports for the Mayo Clinic News Network.

Chris/Patient **Dr. Worrell** **Dr. Stead** **Dr. Van Gompel**

Video	Audio
Wedding photos with COURTESY from Photographer	**/// MUSIC – photos**
	Chris White says he is counting new blessings these days; among them – his new wife Tina.
/// SOT @ 01:53 :12 Chris	**"She's amazing. You know, full of life, always there, you know, caring, outgoing, just phenomenal." (tighten pauses in SOT)**
	Getting married, even close relationships, were something Chris thought may never be possible.
/// NATS connecting wires to head	**/// NATS connecting wires**
/// SOT 00:01:02 Chris b-roll with connecting wires to head	**"I had a stroke when I was born and, as a result of that, I developed epilepsy." (tighten pauses)**
/// SOT @ 08:4- Dr. Worrell **TITLE: Gregory Worrell, M.D.** **Neurology** **Mayo Clinic**	**"Chris was having multiple seizures a week. But, even if it's one seizure a month or one seizure every couple of months, it still is very impactful on how people live their lives."**
/// SOT @ (about 07:35) ON CAM **TITLE: Matt Stead, M.D., PH.D.** **Pediatric Neurology** **Mayo Clinic**	**"You can't drive. You can't swim alone. You can't bathe alone. And people don't – they fear having seizures at work, things like that."**

/// SOT @ 00:03:32 :09 Chris ON CAM **TITLE: Chris White** **Epilepsy patient**	**"It feels like you never know what's going to happen, if you're even going to be able to maybe leave the house."**
TRACK – 3	Two-thirds of epilepsy patients respond well to medications for controlling their seizures.
/// SOT @ 06:26 :08 Dr. Van Gompel **TITLE: Jamie Van Gompel, M.D.** **Neurosurgery** **Mayo Clinic**	**"They affect how electricity runs around the brain and, obviously, epilepsy is a form of bad electricity in the brain."**
/// SOT @ 01:56 :06 Dr. Worrell CAM	**"The list of medications is long as well, so, there's roughly 30 medications that are available currently."**
TRACK – 4	Unfortunately, **none** worked for Chris. So, a team of specialists at Mayo Clinic looked for other solutions to help him.
/// SOT @ 01:09 Dr. Stead ON CAM	**"Well, for medically refractory epilepsy, the standard of care is brain resection, and it still is."**
TRACK – 5	Resection means cutting out the area of brain where the seizures originate.
/// SOT @ 04:11 :05 **Dr. Worrell** **b-roll images of leads in brain**	**"By putting electrodes directly in the brain – we identified where his seizures were coming from."**
/// SOT @ 5:03 :07 **DR. VAN GOMPEL** **Cont. Dr. V.Gompel at computer showing leads in Chris's brain**	**"And it took a long time to figure out exactly where the seizure was coming from, and it turns out it was coming form an area just below speech in the insula."**
/// SOT@ (about 01:25) ON CAM **Dr. Stead**	**"So while it may alleviate the seizures, the patient would be left with speech problems or motor problems or visual problems, language problems, those kinds of things."**
TRACK – 6 **Chris's brain images ..**	Since surgically removing the source of the erratic electrical signals was too risky, the Mayo Clinic team decided to try to suppress them - with continuous mild brain stimulation of another kind.
/// SOT @ 04:11 :-- ON CAM **Dr. Stead**	**"We deliver relatively low amplitude, low frequency pulses to the regions of brain that are causing the seizures continuously."**
/// SOT @ 10:04 :03 Van Gompel	**"Really, he had no other good options."**
/// SOT @ 04:50 :-- ON CAM **Dr. Stead**	**"The device that we actually, technically implant is typically used for pain, for spinal cord stimulation."**
TRACK – 7	For Chris, the results were immediate. Except for one episode triggered by a car accident, he's had no more epileptic seizures.

/// SOT @ 11:46 :03 Van Gompel	**"It's a pretty powerful therapy, we think."**
/// SOT @ 00:00:24 :03 Chris	**"Mayo probably has saved my life."**
/// SOT @ 00:08:51 Van Gompel	**"So we're unaware of anybody being treated this way anywhere else. But at least here, the number is less than 20."**
TRACK – 8	Which bring us back to Chris counting blessings, and not just his own.
/// SOT @ 00:13:09 :12 (tighten SOT?)	**"Overly ecstatic that I'm able to partake in something like this that hopefully can help someone else and not just me."**
/// SOT @ 05:48 :11 Dr. Worrell	**"The feasibility and the safety, that we can control that region of brain and keep the patient from having seizures, that – that's really exciting."**
TRACK – 9	For the Mayo Clinic News network, I'm Ian Roth.

Anchor tag: The implant Chris received differs from standard brain stimulation treatments for epilepsy, which generally delivers electrical currently intermittently and only after the onset of a seizure is detected.